## Musculoskeletal modeling research fellowship

Food and Drug Administration, Silver Spring, MD Jan 2014 – Jan 2015

The position is located in the Functional Performance and Device Use Laboratory within the Office of Science and Engineering Laboratories (OSEL) of the Center for Devices and Radiological Health at the Food and Drug Administration in Silver Spring, MD. OSEL conducts laboratory and field research on medical devices to support the scientific basis for the agency's regulatory decision-making. The candidate would join a dynamic, collaborative team on a project using simulation and experimental data to understand the sex-based factors that contribute to elevated rates of metal-on-metal hip replacement failure in women. The incumbent's primary responsibilities would be motion capture of patient activities and simulation of in-vivo joint forces. This is a one-year fellowship that may be extended to a second year for the right candidate, should funding become available.

Candidates should have received a degree (Bachelor's or Masters of Science) in Biomechanics, Engineering, or related discipline within the last 5 years and be U.S. Citizens or Permanent Residents. Students studying for any of the above qualifications will also be considered. Salary is commensurate with experience.

The strongest candidates will have demonstrated experience in the following areas:

- Skill with creating finite element meshes from anatomical data
- Experience building computational models with patient-specific anatomy
- Some clinical experience with musculoskeletal research (Operating room, gait lab, etc)
- Ability to synthesize results from multiple disciplines and literature reviews

Interested applicants should send their cover letter, resume or CV, and two professional references to <a href="mailto:James.Coburn@fda.hhs.gov">James.Coburn@fda.hhs.gov</a> by November 15th, 2013.

Enquiries for further information are welcome.

## About HHS and the US Food and Drug Administration

Become a part of the Department that touches the lives of every American! At the Department of Health and Human Services you can give back to your community, state, and country by making a difference in the lives of Americans everywhere. Join HHS and help to make our world healthier, safer and better for all Americans.

The Food and Drug Administration is the regulatory, scientific, public health and consumer protection agency responsible for ensuring that all human and animal drugs, and medical devices are safe and effective, that cosmetics, foods, food additives, drugs and medicated feeds for food producing animals, and radiation emitting devices are safe, and for tobacco product regulation in order to decrease the tremendous toll of disease, disability, and death caused by tobacco use in the United States. FDA's programs are national in scope and effect, and the agency's activities have a direct and significant impact on multi-billion dollar industries, in addition to protecting the health and safety of America's consumers. The work of the Agency is carried out by a staff of over 9,000 scientists, physicians, regulatory and other personnel stationed throughout the United States.